

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) An isolated antigen ~~having~~ consisting of a part which is exposed on a surface of a cell ~~positioned at the formation of~~ a solid tumor formed by subcutaneous transplantation of a cultured cancer cell, wherein the antigen comprises residues 600-1,960 of SEQ ID NO: 17, and wherein the cultured cancer cell is selected from the group consisting of a cultured cancer cell from gastric cancer, a cultured cancer cell from breast cancer, a cultured cancer cell from colon cancer, and a cultured cancer cell from esophageal cancer.

2. (Canceled)

3. (Previously Presented) The antigen according to claim 1, wherein the antigen is produced in a greater amount by a cell of the solid tumor formed by subcutaneous transplantation of a cultured cancer cell than by the cultured cancer cell.

4. (Previously Presented) The antigen according to claim 1, wherein the antigen on the surface of a cell of the solid tumor formed by subcutaneous transplantation of a cultured cancer cell is present in a greater amount than the antigen on a surface of ~~a~~ the cultured cancer cell.

5.-11. (Canceled)

12. (Withdrawn) A ligand which recognizes the antigen according to claim 1.

13. (Withdrawn) The ligand according to claim 12, which is an antibody.

14. (Withdrawn) The ligand according to claim 12, which is a monoclonal antibody.

15. (Withdrawn) The ligand according to claim 12, wherein the monoclonal antibody is a human monoclonal antibody.

16. (Withdrawn) The ligand according to claim 12, which is a cancer reactive monoclonal antibody.

17. (Withdrawn) The ligand according to claim 16, wherein the cancer is gastric cancer, breast cancer, colon cancer or esophageal cancer.

18. (Withdrawn) The ligand according to claim 12, wherein a heavy chain hypervariable region comprises the amino acid sequences of SEQ ID NOs: 1, 2 and 3, and a light chain hypervariable region comprises the amino acid sequences of SEQ ID NOs:4, 5 and 6.

19. (Withdrawn) The ligand according to claim 12, which comprises a heavy chain variable region comprising the amino acid sequence of SEQ ID NO:7 and a light chain variable region containing the amino acid sequence of SEQ ID NO:8.

20. (Withdrawn) A pharmaceutical composition, which comprises the ligand according to claim 12 and a pharmaceutically acceptable carrier.

21. (Withdrawn) The pharmaceutical composition according to claim 20, which is a targeting therapy agent.

22. (Withdrawn) The pharmaceutical composition according to claim 20, which targets at a cancer tissue or a cancer cell.

23. (Withdrawn) The pharmaceutical composition according to claim 20, which comprises an antitumor agent, an antitumor protein, an enzyme, a gene or an isotope for treatment.

24. (Withdrawn) The pharmaceutical composition according to claim 20, which is an antitumor agent.

25. (Withdrawn) The pharmaceutical composition according to claim 20, wherein the cancer is gastric cancer, breast cancer, colon cancer or esophageal cancer.

26. (Withdrawn) The pharmaceutical composition according to claim 20, which comprises liposome.

27. (Withdrawn) A composition, which comprises the ligand according to claim 12 and a labeling agent.

28. (Withdrawn) The composition according to claim 27, which specifically labels a cancer tissue or a cancer cell.

29. (Withdrawn) The composition according to claim 27, wherein the cancer is gastric cancer, breast cancer, colon cancer or esophageal cancer.

30. (Withdrawn) The composition according to claim 27, wherein the labeling agent is a fluorescent, an enzyme, an isotope or an MRI contrast medium.

31. (Withdrawn – Currently Amended) A method for treating a cancer disease of a cancer disease patient, which comprises administering to the cancer disease patient an effective amount of the pharmaceutical composition according to claim 20,

wherein the cancer disease patient expresses an antigen ~~having~~ consisting of a part which is exposed on a surface of a cell ~~positioned at the formation of~~ a solid tumor formed by subcutaneous transplantation of a cultured cancer cell, wherein the antigen comprises residues 600-1,960 of SEQ ID NO: 17, and wherein the cultured cancer cell is selected from the group consisting of a cultured cancer cell from gastric cancer, a cultured cancer cell from breast cancer, a cultured cancer cell from colon cancer, and a cultured cancer cell from esophageal cancer.

32. (Withdrawn – Currently Amended) A method for treating a cancer disease of a cancer disease patient, which comprises administering to the cancer disease patient an effective amount of the pharmaceutical composition according to claim 20,

wherein the cancer disease patient has a cell which can be labeled by a composition comprising (a) a ligand which recognizes an antigen ~~having~~ consisting of a part which is exposed on a surface of a cell ~~positioned at the formation of~~ a solid tumor formed by subcutaneous transplantation of a cultured cancer cell, wherein the antigen comprises residues 600-1,960 of SEQ ID NO: 17, and wherein the cultured cancer cell is selected from the group consisting of a cultured cancer cell from gastric cancer, a cultured cancer cell from breast cancer, a cultured cancer cell from colon cancer, and a cultured cancer cell from esophageal cancer, and (b) a labeling agent.

33. (Withdrawn – Currently Amended) The ligand according to claim 12, wherein the binding activity of the ligand which recognizes an antigen ~~having~~ consisting of a part

which is exposed on a surface of a cell ~~positioned at the formation~~ of a solid tumor formed by subcutaneous transplantation of a cultured cancer cell, wherein the antigen comprises residues 600-1,960 of SEQ ID NO: 17, and wherein the cultured cancer cell is selected from the group consisting of a cultured cancer cell from gastric cancer, a cultured cancer cell from breast cancer, a cultured cancer cell from colon cancer, and a cultured cancer cell from esophageal cancer, to the antigen is from 0.5×10^6 units/mg to 2.0×10^6 units/mg.

34. (Withdrawn) The ligand according to claim 12, wherein the binding activity is from 0.7×10^6 units/mg to 1.5×10^6 units/mg, from 0.7×10^6 units/mg to 1.3×10^6 units/mg, or from 0.8×10^6 units/mg to 1.2×10^6 units/mg.

35. (Withdrawn) The ligand according to claim 12, wherein the binding activity is from 0.8×10^6 units/mg to 1.2×10^6 units/mg.

36. (Withdrawn - Currently Amended) The ~~method~~ antigen of claim 3, wherein the amount of antigen produced by the cell of the solid tumor is at least 3 times greater than the amount of the antigen produced by the cultured cancer cell.

37. (Withdrawn - Currently Amended) The ~~method~~ antigen of claim 3, wherein the amount of antigen produced by the cell of the solid tumor is at least 4 times greater than the amount of the antigen produced by the cultured cancer cell.

38. (Withdrawn - Currently Amended) The ~~method~~ antigen of claim 3, wherein the amount of antigen produced by the cell of the solid tumor is at least 10 times greater than the amount of the antigen produced by the cultured cancer cell.

39. (Withdrawn - Currently Amended) The ~~method~~ antigen of claim 4, wherein the amount of the antigen on the surface of the cell of the solid tumor is at least 3 times greater than the amount of the antigen on the surface of the cultured cell.

40. (Withdrawn - Currently Amended) The ~~method~~ antigen of claim 4, wherein the amount of the antigen on the surface of the cell of the solid tumor is at least 4 times greater than the amount of the antigen on the surface of the cultured cell.

41. (Withdrawn - Currently Amended) The ~~method~~ antigen of claim 4, wherein the amount of the antigen on the surface of the cell of the solid tumor is at least 10 times greater than the amount of the antigen on the surface of the cultured cell.